

The VacScene

Public Health – Seattle & King County Immunization Newsletter Volume 13 , Number 1 January/February 2007

What's Inside?

Influenza activity increasing.....	1
VFC program news	2
Windstorm thank you.....	2
Varicella outbreak control.....	2
Fewer shots, more choices: combination vaccines.....	3
2007 Harmonized childhood and adolescent immunization schedules.....	4
Tools you can use: Stop germs, stay healthy.....	4

The VacScene

Public Health - Seattle & King County Communicable Disease Epidemiology and Immunization Section

Jeffrey S. Duchin, M.D., Chief Communicable
Disease Control, Epidemiology & Immunization
Section

999 Third Avenue, Suite 500
Seattle, WA 98104

Phone: 206-296-4774 Fax: 206-296-4803

Email: lauren.greenfield@metrokc.gov

Website: www.metrokc.gov/health

The VacScene is a publication of Public Health – Seattle & King County written for health professionals. Content is consistent with the most current recommendations from the Centers for Disease Control and Prevention (CDC) and the Advisory Committee on Immunization Practices (ACIP).

Publication Staff

Editor: Lauren S. Greenfield

Contributors: Betsy Hubbard, Julie Choudhuri,
Darren Robertson



Influenza Activity Increasing: It's not too late to vaccinate!

Reports of influenza cases have increased in February in King County and in the Pacific Northwest, especially among younger age groups. As of February 25th, there have been 15 pediatric deaths reported nationally, not including two deaths in elementary school children in King County. Reports of school absenteeism this season have exceeded previous highs. However, deaths due to influenza among children remain rare. Despite the high levels of absenteeism in King County schools, our hospitals are not reporting an increase in the numbers of children hospitalized for serious influenza-related complications. For complete current information on flu activity in King County, see: <http://www.metrokc.gov/health/immunization/fluseason.htm>

During a “typical” year, influenza causes significant numbers of illnesses and hospitalizations, with the highest levels among children under 2 years of age and children with underlying medical conditions. In the 1990s, we had several years where 2-3 children 15 years or younger died during influenza seasons locally. It is estimated that an average of between 50 and 100 children die of influenza in the U.S. each year. In 2003, a high number of children (153) died nationally, but we had no deaths locally.

Public Health - Seattle & King County conducts influenza surveillance in order to provide information on local influenza activity to health care providers and the public. Because individual influenza cases are not reportable (with the exception of pediatric influenza deaths) Public Health monitors data from several sources in order to understand when influenza has arrived, is most active, and subsides in our community. These sources include:

- King County health care providers who volunteer to be part of our “Sentinel Influenza” network
- Influenza rapid antigen test data from several local labs
- Hospital Emergency Department visits for influenza-like Illness (ILI)
- Reports of school absenteeism of 10 percent or more of students absent during a given week
- Respiratory disease outbreaks at long term care facilities
- Deaths due to pneumonia and influenza (P&I Deaths) – Death due to influenza in a child <19 years of age is notifiable as a rare disease of public health significance. Health care providers should report pediatric deaths confirmed or suspected to be due to influenza to Public Health.

Influenza prevention was a topic of discussion at the February 2007 meeting of the Advisory Committee on Immunization Practices (ACIP). The ACIP passed a resolution recommending that children <9 years of age who received only one dose of flu vaccine during their first year of vaccination should receive two doses in the following influenza season. No recommendation was made for universal immunization for children 6 months through 18 years for the 2007-08 season, but ACIP acknowledged that it is likely to move in that direction over the next 2-3 years. Currently available vaccine supply would not meet the demands of a universal immunization recommendation. In addition to the high-risk target groups, the current recommendations allow for immunization for anyone wishing to avoid influenza, supplies permitting.

VFC Program News

- We are pleased to introduce two new vaccines to the King County VFC Program menu: ProQuad™ (measles-mumps-rubella-varicella, or MMR-V) and Pediarix™ (DTaP-Hepatitis B-IPV). Providers should have received the January 26, 2007, Broadcast Fax #1, which included the new vaccine request form and guidelines for restricted use of these two “new” vaccines. Let us know if you have questions about correct storage and usage of these vaccines. Be especially mindful of the storage requirements for MMR-V (+5F or colder).
- The new Vaccine Request Form, developed by the State Department of Health, includes usage and inventory reporting information along with your vaccine request. This is to ensure equitable distribution of vaccine throughout the local health jurisdictions and to minimize provider risk by preventing overstocking. Please note that MMR-V and single antigen varicella vaccine can be ordered at the same time and shipped to you in the same storage container. Be sure to use the new vaccine request form for fastest service on your vaccine needs.
- King County is switching to a new third-party vaccine distributor, McKesson, in late February. Once the switch has been made, providers will continue to request and receive vaccine in the same ways, with several noteworthy changes: 1) Vaccine shipments will arrive in styrofoam coolers boxed inside cardboard; 2) The styrofoam coolers can be recycled by returning them to McKesson at no cost to the provider (be sure to save several coolers for emergency transport of vaccine); and 3) Expired and spoiled vaccine will also be returned to McKesson, rather than to Public Health. You will be notified of complete details on this new process when new forms are produced.
- The State Department of Health continues to work on securing funding to implement the ACIP recommendation for the 2nd dose of varicella, as well as for the purchase of two new vaccines, Gardasil™ (HPV) and RotaTeq™ (rotavirus vaccine). We anticipate the inclusion of these new vaccines in WA State’s VFC program by early summer 2007.

Windstorm Thank You

Public Health and the VFC Program wish to extend our sincere thanks and appreciation to all King County health care providers who worked so hard to protect vaccine

from damage during the crazy weather we had in December and into January. Although the storm of the century resulted in the loss of about one in 10 doses of vaccine in circulation due to challenging storage conditions, this represents 1% or less of the total value of vaccine distributed in the year 2006. Heroic employees at many provider offices packed, transported, drove, slogged, searched, stored, and monitored in order to protect about \$1 million worth of vaccine. Public Health is preparing extensive new guidelines for the safe handling of vaccines in a power outage situation, with many changes based on lessons learned from this extraordinary winter.

Varicella Outbreak Control

In the 2006-2007 school year thus far, Public Health has received 7 reports of varicella outbreaks in King County elementary schools and child care centers. Though the majority were mild cases among vaccinated students, the vaccine has been effective at preventing chickenpox complications.

Though an individual case of varicella is not notifiable in King County, outbreaks of varicella in school and child care centers are reportable. During an outbreak, it is especially important that ill students be excluded from school until afebrile and all lesions have crusted over; for those without vesicular lesions (as may occur in vaccinated individuals), the child may return to school when afebrile **and** the rash is beginning to resolve. **For outbreak control, susceptible children should receive varicella vaccine, and children 12 months and older who have had only one dose of varicella vaccine should receive a second dose provided the appropriate interval has elapsed since the first dose** (3 months for people 12 months to 12 years of age and at least 4 weeks for people 13 or more years of age).

Though a second dose of varicella vaccine through the VFC program cannot yet be used routinely for children 12 months to 12 years of age, VFC vaccine *may* be used for a second dose in this age group to control a varicella outbreak, following consultation with Public Health – Seattle & King County Communicable Disease/Epidemiology staff (206-296-4774).

The WA State VFC program has requested supplemental funding from the state legislature in order to implement the ACIP recommendation for a *routine* second dose of varicella in children younger than 12 years of age. It is anticipated this will occur by summer of this year. VFC providers will be notified when approval is obtained.

Fewer Shots, More Choices: Combination Vaccines

The WA State VFC program recently added two combination vaccines to its formulary: Pediarix[®] (DTaP-IPV-Hep B) and ProQuad[®] (MMR-V). Pediarix was licensed in 2002 and MMR-V was licensed in 2005; both provide immunogenicity similar to their single component vaccines. Pediarix and ProQuad may be administered simultaneously with other vaccines, at different injection sites.

Neither Pediarix nor ProQuad contain thimerosal as a preservative. Follow the contraindications and precautions for the component vaccines. Document the vaccine under each separate component. Supplies for these combination vaccines may be limited so please follow the VFC guidelines for usage (described below). Also, note that you will need to use the Vaccine Information Statements (VIS) for the individual vaccines (e.g. for Pediarix, give the DTaP, Hepatitis B, and IPV VIS forms).

Side effects: For both Pediarix and ProQuad, side effects are comparable with their component vaccines, with a few exceptions. **Pediarix:** Infants had somewhat higher rates of fever $\geq 100.4^\circ\text{F}$ than infants who received the single vaccines at separate sites¹. **ProQuad:** Fever of $\geq 102^\circ\text{F}$ was observed in 21.5% of MMR-V recipients versus 14.9% of MMR and varicella vaccine recipients, and measles-like rash was observed in 3.0% of recipients of MMR-V vaccine recipients versus 2.1% of those administered MMR and varicella vaccines². Rash at the injection site was also more common among MMR-V recipients.

Pediarix (DTaP - IPV - Hep B combination)

- Licensed for ages 6 weeks to 7 years, *but* the VFC supply should be used only for ages 2-35 months
- Approved for 3 doses at 2, 4, and 6 months
- To be used when all 3 vaccines are indicated for the primary series
- Pediarix *may* be used at 4 months of age if Hep B birth dose was not given
- Single injections of DTaP, IPV, and Hep B may replace any dose in the series
- Pediarix is not approved for booster doses, but can be used for catch-up vaccination for children through 35 months of age who have not completed the primary series
- Minimum intervals: Dose 1 to dose 2 is 4 weeks; dose 2 to dose 3 is 8 weeks
- Refrigerate Pediarix between 36-46°F (2° and 8°C). The vaccine is sensitive to freezing temperatures.

Examples of how you might use Pediarix:

Example 1:

Child had a Hepatitis B birth dose

Birth	2 mos	4 mos	6 mos
	Hib	Hib	Hib
HepB	Pediarix HepB DTaP IPV		Pediarix HepB DTaP IPV
		DTaP	
		IPV	
	PCV7	PCV7	PCV7

Example 2:

Child has *not* had a Hepatitis B birth dose

Birth	2 mos	4 mos	6 mos
	Hib	Hib	Hib
	Pediarix HepB DTaP IPV	Pediarix HepB DTaP IPV	Pediarix HepB DTaP IPV
	PCV7	PCV7	PCV7

ProQuad[™] or MMR-V (Measles-Mumps-Rubella-Varicella combination)

- To be used only for a single dose when MMR and varicella vaccines are both indicated for the *first* time. (MMR-V is not to be used for second dose due to funding limitations).
- Licensed for ages 12 months to 12 years, but use the limited VFC supply for children 12-35 months of age
- The interval between MMR-V and another measles-containing vaccine, such as MMR, is one month.
- The interval between MMR-V and a varicella-containing vaccine is three months for children 12 months to 12 years, and one month for persons 13 years and older.
- Follow the rules for spacing live vaccines and antibody-containing products outlined in CDC's *General Recommendations for Immunization*³
- Must be stored frozen at or below +5F (-15C)
- Use within 30 minutes of reconstitution

References:

¹ Glaxo Smith Kline. Pediarix[®] [Diphtheria and Tetanus Toxoids and Acellular Pertussis Adsorbed, Hepatitis B (Recombinant) and Inactivated Poliovirus Vaccine Combined] prescribing information. Rixensart, Belgium: GlaxoSmithKline; 2006.

² Merck & Co., Inc. ProQuad[®] [measles, mumps, rubella and varicella (Oka/Merck) virus vaccine live] prescribing information. Whitehouse Station, NJ: Merck & Co., Inc.; 2006.

³ CDC. General recommendations on immunization. MMWR 2006; 55(No. R-15).

Highlights

2007 Harmonized Childhood and Adolescent Immunization Schedules

The new 2007 Immunization Schedules have been published. The complete schedules and accompanying footnotes are located at: www.cdc.gov/mmwr/preview/mmwrhtml/mm551a7.htm?s_cid=mm551a_e

Significant changes to the previous childhood and adolescent immunization schedule, published January 2006, include:

- There are now two separate schedules, one for persons aged 0-6 years and another for persons aged 7-18 years. Special populations are represented with purple bars; the 11-12 years assessment is emphasized with the bold, capitalized fonts in the title of that column.
- The influenza vaccine is now recommended for all children aged 6-59 months.
- The new rotavirus vaccine (Rota) is recommended in a 3-dose schedule, with the second and third doses 2 and 6 months after the first dose, respectively. Rotavirus vaccine should not be initiated for infants aged >12 weeks and should not be administered after age 32 weeks.
- Varicella vaccine recommendations are updated to reflect the first dose at age 12-15 months and a newly recommended second dose at age 4-6 years. **NOTE:** WA State VFC program must first obtain funding from the State legislature before the second dose varicella

recommendation can be implemented. VFC providers will be notified when approval for 2nd dose varicella has been obtained.

- Routine vaccination with the new human papillomavirus vaccine (HPV) is recommended for females aged 11-12 years.
- Rotavirus, HPV and varicella vaccines are incorporated in the catch-up immunization schedule.

Tools You Can Use: “Stop Germs, Stay Healthy”

“Stop Germs, Stay Healthy!” is a public education campaign sponsored by King County and Public Health – Seattle & King County. The campaign promotes good health habits and behaviors to limit the transmission of respiratory illnesses such as cold and flu, to help our community stay healthy year round.

“Stop Germs, Stay Healthy!” posters are available at no cost. The Handwashing poster (8 ½” x 11”) has been translated into Chinese, Korean, Russian, Somali, Spanish and Vietnamese. The Handwashing window sticker (3 ¾” x 7 1/2”) is available in English and Spanish.

To acquire “Stop Germs” posters you can download and print the posters: www.metrokc.gov/health/stopgerms/posters. Order hardcover posters and stickers by completing the online order form: www.metrokc.gov/health/stopgerms/posters. Questions? Email: Dolores Rossman, Campaign Coordinator, Public Health - Seattle & King County: dolores.rossman@metrokc.gov